

Features

- Formerly J.W. Miller® model
- High Q value
- Inductance range: 0.1 μ H to 1000 μ H
- RoHS compliant*

Applications

- Filters
- Output chokes

9230 Series – Molded Axial Inductor

Electrical Specifications

Bourns Part No.	Inductance		Q Min.	Test Frequency (MHz)	SRF (MHz) Min.	DCR (Ω) Max.	Idc (mA)	Core Material
	(μ H)	ToI. (%)						
9230-94-RC	0.10	\pm 10	40	25	690	0.07	1100	Phenolic
9230-96-RC	0.12	\pm 10	40	25	650	0.08	1100	Phenolic
9230-00-RC	0.15	\pm 10	38	25	600	0.10	1100	Phenolic
9230-02-RC	0.18	\pm 10	35	25	550	0.12	1010	Phenolic
9230-04-RC	0.22	\pm 10	33	25	510	0.14	935	Phenolic
9230-06-RC	0.27	\pm 10	33	25	430	0.16	875	Phenolic
9230-08-RC	0.33	\pm 10	30	25	410	0.20	780	Phenolic
9230-10-RC	0.39	\pm 10	30	25	380	0.30	640	Phenolic
9230-12-RC	0.47	\pm 10	30	25	340	0.35	590	Phenolic
9230-14-RC	0.56	\pm 10	30	25	300	0.50	495	Phenolic
9230-16-RC	0.68	\pm 10	28	25	275	0.60	450	Phenolic
9230-18-RC	0.82	\pm 10	28	25	250	0.85	380	Phenolic
9230-20-RC	1.0	\pm 10	25	25	230	1.00	350	Phenolic
9230-22-RC	1.2	\pm 10	25	7.9	150	0.18	825	Ferrite
9230-24-RC	1.5	\pm 10	28	7.9	140	0.22	745	Ferrite
9230-26-RC	1.8	\pm 10	30	7.9	125	0.30	640	Ferrite
9230-28-RC	2.2	\pm 10	30	7.9	115	0.40	550	Ferrite
9230-30-RC	2.7	\pm 10	37	7.9	100	0.50	495	Ferrite
9230-32-RC	3.3	\pm 10	45	7.9	90	0.85	380	Ferrite
9230-34-RC	3.9	\pm 10	45	7.9	82	1.0	350	Ferrite
9230-36-RC	4.7	\pm 10	45	7.9	75	1.2	320	Ferrite
9230-38-RC	5.6	\pm 10	50	7.9	68	1.8	260	Ferrite
9230-40-RC	6.8	\pm 10	50	7.9	60	2.0	245	Ferrite
9230-42-RC	8.2	\pm 10	55	7.9	55	2.7	210	Ferrite
9230-44-RC	10	\pm 10	55	7.9	50	3.7	180	Ferrite
9230-46-RC	12	\pm 10	45	2.5	40	2.7	210	Ferrite
9230-48-RC	15	\pm 10	45	2.5	35	2.8	205	Ferrite
9230-50-RC	18	\pm 10	50	2.5	32	3.1	195	Ferrite
9230-52-RC	22	\pm 10	50	2.5	25	3.3	190	Ferrite
9230-54-RC	27	\pm 10	50	2.5	22	3.5	185	Ferrite
9230-56-RC	33	\pm 10	45	2.5	24	3.4	187	Ferrite
9230-58-RC	39	\pm 10	45	2.5	22	3.6	180	Ferrite
9230-60-RC	47	\pm 10	45	2.5	20	4.5	165	Ferrite
9230-62-RC	56	\pm 10	45	2.5	18	5.7	145	Ferrite
9230-64-RC	68	\pm 10	50	2.5	15	6.7	135	Ferrite
9230-66-RC	82	\pm 10	50	2.5	14	7.3	130	Ferrite
9230-68-RC	100	\pm 10	50	2.5	13	8.0	125	Ferrite
9230-70-RC	120	\pm 10	30	0.79	12	13	97	Ferrite
9230-72-RC	150	\pm 10	30	0.79	11	15	85	Ferrite
9230-74-RC	180	\pm 10	30	0.79	10	17	79	Ferrite
9230-76-RC	220	\pm 10	30	0.79	9	21	73	Ferrite
9230-78-RC	270	\pm 10	30	0.79	8	25	65	Ferrite
9230-80-RC	330	\pm 10	30	0.79	7	28	62	Ferrite
9230-82-RC	390	\pm 10	30	0.79	6.5	35	55	Ferrite
9230-84-RC	470	\pm 10	30	0.79	6	42	50	Ferrite
9230-86-RC	560	\pm 10	30	0.79	5	46	48	Ferrite
9230-88-RC	680	\pm 10	30	0.79	4.2	60	42	Ferrite
9230-90-RC	820	\pm 10	30	0.79	3.8	65	40	Ferrite
9230-92-RC	1000	\pm 10	30	0.79	3.4	72	38	Ferrite

Additional Information

Click these links for more information:



General Specifications

Temperature Rise 35 °C at I_{dc}
 Operating Temperature
 Ferrite -55 °C to +125 °C
 Phenolic -55 °C to +105 °C
 Storage Temperature
 Ferrite -55 °C to +125 °C
 Phenolic -55 °C to +105 °C
 Dielectric Strength 1000 V_{rms}

Materials

Core Phenolic or Ferrite
 Wire Enameled copper
 Terminal Coating Sn
 Packaging
 Standard 1000 pcs. per bag
 Optional 5000 pcs. per 14-inch reel

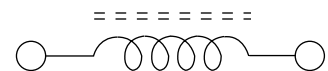
How to Order

9230 - 02 - - - RC

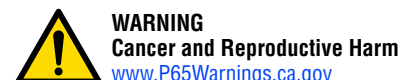
Model _____
 Value Code _____
 Two-digit code from table
 (Example: -02 = 0.18 μ H)
 Packaging Code _____
 Blank = 1000 pcs./bag
 TR = 5000 pcs./14-inch reel
 Compliance Code _____
 RC = RoHS compliant*

Examples:
 • 9230-00-RC = 0.15 μ H packaged
 1000 pcs./bag.
 • 9230-16-TR-RC = 0.68 μ H packaged
 5000 pcs./14-inch reel.

Electrical Schematic



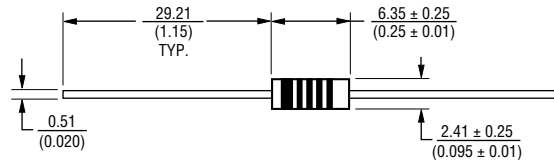
*RoHS Directive 2015/863, Mar 31, 2015 and Annex.
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9230 Series – Molded Axial Inductor

BOURNS®

Product Dimensions



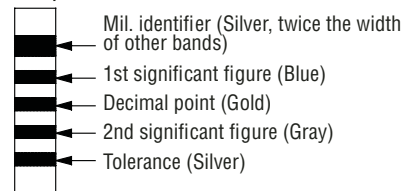
DIMENSIONS: $\frac{\text{MM}}{\text{(INCHES)}}$

NOTE: The wire diameter used on these products is from 0.025 to 0.21 mm. Due to the inductor wire termination being made on the connection pin, careful handling during assembly is required to ensure that the lead is not subjected to any stress close to the termination point. If bending/shaping of the pin is required, maintain stability and avoid excessive or abrupt forces to keep the parts centered and the leads secure on both sides. The bend radius should be located several millimeters away from the wire termination point to ensure that it is not stressed, with possible stretching or snapping occurring.

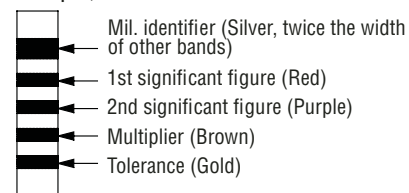
Typical Part Marking - MIL-STD Color Code

Color	1st & 2nd Significant Figure or Decimal Point	Multiplier	Tolerance
Black	0	1	
Brown	1	10	
Red	2	100	
Orange	3	1000	
Yellow	4		
Green	5		
Blue	6		
Violet	7		
Gray	8		
White	9		
Silver			± 10 %
Gold	Decimal Point		± 5 %

Example for L value less than 10 μH
6.8 μH , ±10 %



Example for L value 10 μH and higher
270 μH , ±5 %



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REV. 03/25

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Users should verify actual device performance in their specific applications.

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